

AMENDMENTS TO THE CLAIMS

1-13. (Cancelled)

14. (Currently Amended) A channel type switching method for a ~~m~~Multimedia ~~b~~Broadcast and ~~m~~Multicast ~~s~~Service (MBMS) ~~p~~Point to ~~p~~Point (P-t-P) and ~~p~~Point to ~~m~~Multi point (P-t-M) channel, when a UE having MBMS service moves to a cell in a ~~d~~Destination ~~r~~Radio ~~n~~Network ~~e~~Controller (DRNC) that has an Iur interface with a ~~s~~Serving ~~r~~Radio ~~n~~Network ~~e~~Controller (SRNC), comprising the steps of:

determining in the DRNC, to perform switching channel type between a common channel and a dedicated channel based on a number of users having the MBMS service in the cell;

notifying the SRNC of the determined MBMS channel type from the DRNC;

notifying in the SRNC, the UE to reconfigure an MBMS channel via a Radio Resource Control (RCC) message in order to perform channel type switching to the determined MBMS channel type; and

transmitting MBMS data with the determined channel type to UEs requiring MBMS service.

15. (Previously Presented) The method as set forth in claim 14, wherein said channel switching is at least determined based on comparing a number of UEs requiring MBMS service to a threshold.

16. (Previously Presented) The method as set forth in claim 14, wherein said channel switching further comprises:

the SRNC transmitting a radio link setup request message to the DRNC including at least one MBMS service identifier.

17. (Currently Amended) The method as set forth in claim 14, wherein said channel switching further comprises:

sending, by the SRNC, a radio link setup request message to the DRNC to request a radio link setup; and

determining, by the DRNC, a channel type at least based on a number of UEs that require MBMS service and informing the SRNC of the channel type; ~~and~~
~~notifying the UE to reconfigure an MBMS channel.~~

18. (Currently Amended) The method as set forth in claim 14, wherein said channel switching further comprises:

the SRNC sending a message to inquire about MBMS service type from the DRNC;
the DRNC determining a channel type to be set up and informing the SRNC of the parameters of MBMS channel set up; and
the SRNC completing setting up a dedicated channel or obtaining common channel information from the DRNC; ~~and~~
~~the SRNC notifying a UE to reconfigure an MBMS channel via a radio resource control (RRC) message to complete channel switching.~~

19. (Previously Presented) The method as set forth in claim 16, wherein said message transferred from the SRNC to the DRNC comprises an MBMS service identifier, which enables the DRNC to count a number of MBMS users.

20. (Previously Presented) The method as set forth in claim 16, wherein, if the UE is first in requesting MBMS service in the DRNC, the DRNC sets up a radio access bearer (RAB) connection with a core network.

21. (Currently Amended) A channel type switching method for a ~~m~~Multimedia ~~b~~Broadcast and ~~m~~Multicast ~~s~~Service (MBMS) ~~p~~Point to ~~p~~Point (P-t-P) and ~~p~~Point to ~~m~~Multi point (P-t-M) channel in a radio network controller, comprising:

checking a number of User Equipments (UEs) in a cell to determine an MBMS channel type;
determining the MBMS channel type by comparing the number of UEs that require MBMS service to a threshold; ~~and~~
reporting change of the MBMS channel type to a serving radio network controller (SRNC); and

receiving in the SRNC, the MBMS channel type from a Destination Radio Network Controller (DRNC), and notifying in the SRNC, the UE to reconfigure an MBMS channel via a Radio Resource Control (RRC) message in order to perform channel type switching to the MBMS channel type.

22. (Previously Presented) The method as set forth in claim 21, further comprising:
receiving, at the SRNC, the MBMS channel type from a destination radio network controller (DRNC); and
transmitting a channel reconfiguration request message to the UE.

23. (Currently Amended) A channel type switching method for a ~~m~~Multimedia ~~b~~Broadcast and ~~m~~Multicast ~~s~~Service (MBMS) ~~p~~Point to ~~p~~Point (P-t-P) and ~~p~~Point to ~~m~~Multi point (P-t-M) channel, comprising the steps of:

transmitting, from a ~~s~~Serving ~~r~~Radio ~~n~~Network ~~e~~Controller (SRNC), a radio link setup message to a ~~d~~Destination ~~r~~Radio ~~n~~Network ~~e~~Controller (DRNC);

transmitting, upon receiving the radio link setup message in the DRNC, an MBMS channel type to the SRNC;

notifying, at the SRNC, a User Equipment (UE) that requires MBMS service to reconfigure the MBMS channel type via a ~~r~~Radio ~~r~~Resource ~~e~~Control (RRC) message;

receiving, at the UE, the MBMS channel type; and

receiving MBMS data on an MBMS channel using the MBMS channel type, wherein the MBMS channel type is one of a dedicated channel or a common channel ~~which is received by a plurality of UEs.~~

24. (Previously Presented) The method as set forth in claim 23, wherein the radio link setup message comprises an MBMS service identifier.

25. (Currently Amended) A data communication channel establishment method for setting up multimedia broadcast/multicast service (MBMS) with a core network (CN) via a destination radio network controller (DRNC), when a UE moves to a cell controlled by the DRNC, comprising the

steps of:

a serving radio network controller (SRNC) sending a common transport channel resource request message to the DRNC;

the DRNC sending an MBMS service request message to the CN;

the CN requesting to set up a data connection with the DRNC; and

the DRNC sending a response message to the CN.

26. (Currently Amended) The method as set forth in claim 25, wherein the step of sending the SRNC sending common transport channel resource request messages to the DRNC further comprises sending an MBMS service identifier.